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EXAMINER

ENSEY, BRIAN

ART UNIT PAPER NUMBER

2643

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,891

Applicant(s)

FEELEY ET AL.

Examiner

Brian Ensey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-57 and 60 is/are rejected.
- 7) ☒ Claim(s) 58 and 59 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 91602,40103,22404.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1-21, 30-40 45-52 and 54-60 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 14, 25-27, 29 and 36 of copending Application No. 10/238829. Although the conflicting claims are not identical, they are not patentably distinct from each other because a BTE component with a CIC component having a speaker disposed in the CIC component and a connection cable detachably coupled to the BTE and CIC components is disclosed in each application..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 6, 7, 9, 14-16, 18-21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren et al. U.S. Patent Application Publication 2002/0196958 A1 in view of Anderson et al. U.S. Patent No. 6,704,423.

Regarding claim 1, Halteren discloses an earpiece auditory device comprising: a behind-the-ear (BTE) component, the BTE component being shaped to fit behind an ear of a user, wherein said BTE component comprises a module including processing circuitry; a completely-in-canal (CIC) component, the CIC component being shaped to fit into the ear canal of the user in such a manner as to touch the bony portion of the ear canal of the user, wherein said CIC component comprises an ear mold; and a connector physically coupling said BTE component to said CIC component, said connector having at least one end detachably physically coupled to said BTE component or said CIC component. Further, Halteren teaches an inflatable device to fit

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as comfortably in the bony portion of the ear canal as an earmold (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055,0080, 0094, 0096 and 0097). Halteren does not expressly disclose said CIC component comprises an ear mold. However, Anderson teaches a BTE hearing device with a tube connecting an earmold (33) inserted into the ear canal (See Fig. 3 and col. 4, lines 1-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an earmold for the CIC portion to ensure a comfortable fit.

Regarding claim 2, Halteren further discloses said completely-in-canal component further comprises a speaker (See Fig. 17 and paragraphs 0045-0049).

Regarding claim 3, Halteren further discloses said physically coupling includes communicatively coupling said behind-the-ear component to said completely-in-canal component, and wherein at least one of the at least one detachable physical coupling includes a detachable communicative coupling (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055,0080, 0094, 0096 and 0097).

Regarding claim 4, Halteren further discloses wherein at least one of the at least one detachable physical coupling is to said behind-the-ear component (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055,0080, 0094, 0096 and 0097).

Regarding claim 6, Halteren further discloses said connector comprises: at least one wire cable; and at least one fastener physically, as well as communicatively, coupled to said behind-the-ear component or said completely-in-canal component; wherein at least one of said at least one fastener provides at least one of the at least one detachable physical coupling (See Figs. 7 and 17 and paragraphs 0065 and 0085).

Regarding claim 7, Halteren further discloses at least one of said at least one fastener is

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operable to prohibit an undesirable external element from interfering with a detachable communicative coupling between said connector and said behind-the-ear component (See Figs. 7 and 17 and paragraphs 0065 and 0085).

Regarding claim 9, Halteren does not expressly disclose the at least one detachable communicative coupling includes a hole and prong arrangement. However, Halteren teaches a socket having electrical terminals for connecting the receiver to the hearing aid via electrical terminals in the socket (See paragraph 0085). The use of a hole and prong arrangement is well known in the connector art. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a hole and prong arrangement for quick and easy assembly and disassembly.

Regarding claim 14, Halteren further discloses said at least one fastener includes a fastener detachably physically coupled to said module of said behind-the-ear component (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097)

Regarding claim 15, Halteren further discloses the detachable physical coupling between said fastener and said module includes a detachable communicative coupling (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097)

Regarding claim 16, Halteren does not expressly disclose said ear mold is a universal fit ear mold. Halteren does teach an inflatable CIC component fabricated from a flexible material such as latex, silicone or any other elastomer that universally fits the ear canal of any user (See paragraph 0026). Further, Anderson teaches a BTE hearing device with a tube connecting an earmold (33) inserted into the ear canal (See Fig. 3 and col. 4, lines 1-26). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to provide a universal earmold for the CIC portion to ensure a comfortable fit.

Regarding claims 18 and 19, Halteren further discloses processing circuitry includes sound processing circuitry wherein said sound processing circuitry includes sound amplification circuitry (See Fig. 17 and paragraphs 0030-0040 and 0056).

Regarding claim 20, Halteren does not expressly disclose sound processing circuitry includes sound reduction circuitry. However, the use of sound reduction circuitry is well known in the hearing aid field. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to use sound reduction circuitry for improved quality signals for the user.

Regarding claim 21, Halteren further discloses said behind-the-ear component further includes a microphone (See Fig. 17 and paragraph 0031).

Regarding claim 30, Halteren does not expressly disclose at least one of the at least one detachable physical coupling includes at least one projection of said connector engaging at least one groove of said behind-the-ear component or said completely-in-canal component. However, projection and groove coupling connectors are well known in the coupling art and it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a projection and groove coupler for a secure and easily assembled connection unit.

4. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren in view of Anderson as applied to claim 1 above, and further in view of Fretz et al. U.S. Patent Application Publication 2003/0002700.

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Regarding claim 5, Halteren does not expressly disclose at least one of the at least one detachable physical coupling is to said completely-in-canal component. However, Halteren teaches a connector detachably connected at the BTE end. Further, Fretz teaches a BTE hearing device with a removable coupling at both ends. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable coupling at either or both ends for modular repair or replacement.

Regarding claim 8, Halteren does not expressly disclose at least one of said at least one fastener is operable to prohibit an undesirable external element from interfering with a detachable communicative coupling between said connector and said completely-in-canal component. However, Halteren teaches a connector detachably connected at the BTE end. Further, Fretz teaches a BTE hearing device with a removable coupling at both ends. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable coupling operable to prohibit an undesirable external element from interfering with a detachable communicative coupling between said connector at either or both ends for modular repair or replacement.

5. Claims 10-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim 1 above, and further in view of Toht et al. U.S. Patent No. 2,930,856.

Regarding claim 10, Halteren discloses a device as claimed. Halteren does not expressly disclose a speaker module is detachably physically coupled to said ear mold. However, Toht teaches a BTE hearing device with a speaker module electrically connected with one end of an electrical cable is detachably physically coupled to an ear mold (See Fig. 1 and col. 4, lines 49-

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63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

Regarding claim 11, Halteren discloses a device as claimed. Halteren does not expressly disclose said completely-in-canal component further includes a speaker receiving member, and wherein said connector includes a speaker fastener detachably physically coupled to said speaker receiving member. However, Toht teaches a BTE hearing device with a speaker module detachably connected to a molded plastic ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

Regarding claim 12, Halteren discloses a device as claimed. Halteren does not expressly disclose said speaker is detachably physically coupled to said speaker fastener. However, Toht teaches a BTE hearing device with a speaker module detachably connected to a molded plastic ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

Regarding claim 13, Halteren discloses a device as claimed. Halteren does not expressly disclose the detachable physical coupling between said speaker and speaker fastener includes a detachable communicative coupling. However, Toht teaches a BTE hearing device with a speaker module detachably connected to a molded plastic ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

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Regarding claim 17, Halteren does not expressly disclose said completely-in-canal component is an open mold configuration. However, Halteren teaches a receiver mounted in the end of the hearing device. Further, Toht teaches a receiver detachably connected to an ear mold. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize an open mold configuration for enclosing the receiver in the ear mold unit for a compact comfortable fit.

6. Claims 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim 1 above, and further in view of Boesen U.S. Patent No. 6,560,468.

Regarding claims 22-24, Halteren discloses a device as claimed. Halteren does not expressly disclose said behind-the-ear component further includes a wireless communications link including a radio frequency (RF) receiver. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device with a CIC bone conduction and air conduction sensor with wireless RF communication (See Figs. 2 and 3 and col. 3, line 17 to col. 4, line 44). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless interface for size reduction and portability.

Regarding claim 25, Halteren discloses a device as claimed. Halteren does not expressly disclose said wireless communications receiver includes a magnetic induction coil. However, the use of a magnetic induction coil is well known in the art. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a magnetic induction coil for use in close contact with a telephone handset.

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Regarding claim 26, Halteren discloses a device as claimed. Halteren does not expressly disclose said communications link includes a transceiver. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device utilizing a transceiver. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless interface for size reduction and portability.

Regarding claim 27, Halteren discloses a device as claimed. Halteren further discloses said behind-the-ear component further includes a microphone.

Regarding claim 28, Halteren discloses a device as claimed. Halteren does not expressly disclose wherein said behind-the-ear component is operable to process data transmissions. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device operable to process data transmissions. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a system operable to process data transmissions in any wireless system for compatibility with existing data systems such as computers and Palm pilots (See col. 4, lines 49-61).

Regarding claim 29, Halteren discloses a device as claimed. Halteren does not expressly disclose said behind-the-ear component is Bluetooth compliant. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device. Further, Bluetooth is a well known communication protocol and Boesen identifies this in his list of disclosed publications. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Bluetooth to provide compatibility with existing networks.

7. Claims 31-35, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren in view of Anderson.

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Regarding claim 31, Halteren discloses an earpiece auditory device comprising: a behind-the-ear component, the behind-the-ear component being shaped to fit behind an ear of a user, said behind the ear component comprising a module including processing circuitry; a completely-in-canal component, the completely-in-canal component being shaped to fit into the ear canal of the user in such a manner as to touch the bony portion of the user's ear canal; means for physically coupling said completely-in-canal component to said behind-the-ear component, wherein said means for physically coupling includes means for detachably physically coupling said completely-in-canal component to said behind-the-ear component. Further, Halteren teaches an inflatable device to fit as comfortably in the bony portion of the ear canal as an earmold (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097).

Halteren does not expressly disclose said CIC component comprises an ear mold. However, Anderson teaches a BTE hearing device with a tube connecting an earmold (33) inserted into the ear canal (See Fig. 3 and col. 4, lines 1-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an earmold for the CIC portion to ensure a comfortable fit.

Regarding claim 32, Halteren further discloses said completely-in-canal component further includes a speaker (See Fig. 17 and paragraphs 0045-0049).

Regarding claim 33, Halteren further discloses said means for physically coupling includes means for communicatively coupling said behind-the-ear component to said completely-in-canal component, and wherein said means for detachably physically coupling includes means for detachably communicatively coupling said completely-in-canal component to said behind-the-ear component (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030,

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0055,0080, 0094, 0096 and 0097).

Regarding claim 34, Halteren further discloses said means for detachably physically coupling includes means for detachably physically coupling at said behind-the-ear component(See Figs. 2 and 17 and paragraphs 0011-0022. 0029, 0030, 0055,0080, 0094, 0096 and 0097).

Regarding claim 35, Halteren further discloses said means for detachably physically coupling also includes means for detachably physically coupling at said completely-in-canal component(See Figs. 2 and 17 and paragraphs 0011-0022. 0029, 0030, 0055,0080, 0094, 0096 and 0097).

Regarding claim 39, Halteren further discloses processing circuitry includes sound processing (See Fig. 17 and paragraphs 0030-0040 and 0056).

Regarding claim 40, Halteren does not expressly disclose sound processing circuitry includes sound reduction circuitry. However, the use of sound reduction circuitry is well known in the hearing aid field. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to use sound reduction circuitry for improved quality signals for the user.

8. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim31 above, and further in view of Toht et al.

Regarding claim 36, Halteren discloses a device as claimed. Halteren does not expressly disclose a speaker receiving member and wherein said means for physically coupling includes a speaker fastening means. However, Toht teaches a BTE hearing device with a speaker module electrically connected with one end of an electrical cable is detachably physically coupled to an

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ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

Regarding claim 37, Halteren discloses a device as claimed. Halteren does not expressly disclose said means for detachably physically coupling includes means for detachably physically coupling said speaker to said speaker fastening means. However, Toht teaches a BTE hearing device with a speaker module electrically connected with one end of an electrical cable is detachably physically coupled to an ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

Regarding claim 38, Halteren discloses a device as claimed. Halteren does not expressly disclose said means for detachably physically coupling includes means for detachably physically coupling said speaker fastening means to said speaker receiving member. However, Toht teaches a BTE hearing device with a speaker module electrically connected with one end of an electrical cable is detachably physically coupled to an ear mold (See Fig. 1 and col. 4, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a removable speaker module for modular repair or replacement.

9. Claims 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim 31 above, and further in view of Boesen.

Regarding claim 41, Halteren discloses a device as claimed. Halteren does not expressly disclose said module includes a communications link. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device with a

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CIC bone conduction and air conduction sensor with a wireless communication link (See Figs. 2 and 3 and col. 3, line 17 to col. 4, line 44). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless interface for size reduction and portability.

Regarding claim 42, Halteren discloses a device as claimed. Halteren further discloses said behind-the-ear component further includes a microphone.

Regarding claim 43, Halteren discloses a device as claimed. Halteren further discloses said module further includes a microphone. Halteren does not expressly disclose said module includes a communications link. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device with a CIC bone conduction and air conduction sensor with a wireless communication link (See Figs. 2 and 3 and col. 3, line 17 to col. 4, line 44). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless interface for size reduction and portability.

Regarding claim 44, Halteren discloses a device as claimed. Halteren does not expressly disclose wherein said behind-the-ear component is operable to process data transmissions. However, wireless communication systems are well known in the art and Boesen teaches a wireless BTE mounted device operable to process data transmissions. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a system operable to process data transmissions in any wireless system for compatibility with existing data systems such as computers and Palm pilots (See col. 4, lines 49-61).

10. Claims 45, 46, 48-52, 54-57 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren in view of Anderson.

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Regarding claim 45, Halteren discloses a method for providing a plurality of earpiece auditory device components, a portion of which may be assembled to form an earpiece auditory device tailored to a user, said method comprising: providing a plurality of behind-the-ear components from which a behind-the-ear component operable to facilitate the user's intended use for the earpiece auditory device may be selected, wherein each of said behind-the-ear components comprises a module including processing circuitry; and providing a plurality of connectors from which a connector of sufficient length to physically couple a selected behind-the-ear component when said selected behind-the-ear component is placed behind the ear of the user to a completely-in-canal component when said completely-in-canal component is placed inside the ear canal of the user so deep as to touch the bony portion of the ear canal may be selected, wherein said connector of sufficient length includes at least one end operable to detachably physically couple to said selected behind-the-ear component or said completely-in-canal component, and wherein said completely-in-canal component comprises a speaker. Further, Halteren teaches an inflatable device to fit as comfortably in the bony portion of the ear canal as an ear mold (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097). Halteren does not expressly disclose said CIC component comprises an ear mold. However, Anderson teaches a BTE hearing device with a tube connecting an ear mold (33) inserted into the ear canal (See Fig. 3 and col. 4, lines 1-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an ear mold for the CIC portion to ensure a comfortable fit.

Regarding claim 46, Halteren discloses said connector of sufficient length is operable to communicatively couple said selected behind-the-ear component to said completely-in-canal

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component, and wherein at least one of the at least one end of said connector of sufficient length operable to detachably physically couple to said selected behind-the-ear component or said completely-in-canal component is also operable to detachably communicatively couple to said selected behind-the-ear component or said completely-in-canal component (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097).

Regarding claim 48, Halteren does not expressly disclose said plurality of said BTE components includes at least two behind-the-ear components of different dimensions. However, Halteren does not limit the BTE construction and multi-dimensional BTE housings are well known in the art. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a BTE devices with different dimensions to select the device which most comfortably fits the intended user.

Regarding claim 49, Halteren further discloses said plurality of said BTE components includes at least one BTE component having sound processing circuitry (See Fig. 17 and paragraphs 0030-0040 and 0056).

Regarding claim 50, Halteren does not expressly disclose at least one BTE component having sound processing circuitry includes at least one BTE component including sound reduction circuitry. However, the use of sound reduction circuitry is well known in the hearing aid field. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to use sound reduction circuitry for improved quality signals for the user.

Regarding claim 51, Halteren further discloses at least one BTE component having sound processing circuitry includes at least two BTE components having different sound processing circuitry. Halteren teaches both a microphone and an amplifier (See paragraph 0031).

Regarding claim 52, Halteren further discloses said behind-the-ear components further includes at least one BTE component having a microphone (See Fig. 17 and paragraph 0031).

Regarding claim 54, Halteren further discloses providing a plurality of CIC components from which said CIC component may be selected (See Fig. 10 and 17 and paragraphs 0030-0040 and 0056).

Regarding claim 55, Halteren further discloses providing a plurality of at least one element to be included in said completely-in-canal component, from which at least one of the elements to be included in said completely-in-canal component may be selected (See Fig. 10 and 17 and paragraphs 0030-0040 and 0056).

Regarding claim 56, Halteren does not expressly said plurality of at least one element includes at least two ear molds of differing dimensions at least one of which fits the user's ear structure. However, it is well known in the art to provide multiple ear molds to best fit a user's ear canal. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a sufficient number of ear molds to comfortably fit the intended user.

Regarding claim 57, Halteren does not expressly disclose said plurality of at least one element includes at least one universal fit ear mold. Halteren does teach an inflatable CIC component fabricated from a flexible material such as latex, silicone or any other elastomer that universally fits the ear canal of any user (See paragraph 0026). Further, Anderson teaches a BTE

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hearing device with a tube connecting an earmold (33) inserted into the ear canal (See Fig. 3 and col. 4, lines 1-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a universal earmold for the CIC portion to ensure a comfortable fit.

Regarding claim 60, Halteren further discloses said connector of sufficient length includes at least one wire cable and at least one fastener operable to facilitate a detachable physical coupling (See Figs. 2 and 17 and paragraphs 0011-0022, 0029, 0030, 0055, 0080, 0094, 0096 and 0097).

11. Claims 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim 45 above, and further in view of Toht et al.

Regarding claim 47, Halteren discloses a method as claimed. Halteren does not expressly disclose said plurality of said behind-the-ear components includes a behind-the-ear component fitting behind the ear of the particular user in such a manner as to be made invisible by the user's ear. However, mounting BTE components to be invisible to the user is a primary goal in the art and Toht teaches a method to make the entire combination inconspicuous to a casual observer (See col. 2, lines 3-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the unit as invisible as possible to minimize possible embarrassment of the user.

12. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Halteren over Anderson as applied to claim 45 above, and further in view of Boesen.

Regarding claim 53, Halteren discloses a device as claimed. Halteren does not expressly disclose said plurality of BTE components includes at least one BTE component having a communications link. However, wireless communication systems are well known in the art and

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Boesen teaches a wireless BTE mounted device with a CIC bone conduction and air conduction sensor with a wireless communication link (See Figs. 2 and 3 and col. 3, line 17 to col. 4, line 44). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless interface for size reduction and portability.

Allowable Subject Matter

Claims 58 and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 703-305-7363. The examiner can normally be reached on Mon-Fri: 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9306, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

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BKE

August 16, 2004


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